DOCUMENT RESUME

ED 113 893

EC 080 246

AUTHOR   Lyall, J.; And Others
TITLE   Manual for the Deaf-Blind Program and Ability
                Screening Test.
INSTITUTION   Ellisville State School, Miss. Mississippi Deaf-Blind
                Evaluation Center.
PUB DATE   72
NOTE   28p.

EDRS PRICE   MF-$0.76 HC-$1.95 Plus Postage
DESCRIPTORS   Ability Identification; Child Development; *Deaf
                Blind; Educational Needs; Exceptional Child
                Education; *Guidelines; *Multiply Handicapped;
                Program Planning; *Screening Tests; \Student
                Evaluation; Test Construction; *Test
                Interpretation

ABSTRACT
                Presented are a manual and a screening test to assist
teachers and professionals to determine the functional ability level
and individual program needs of deaf blind and multiply handicapped
children. It is noted that the individually administered 10-minute
test, based on Gesell's developmental theory, consists of items in
seven basic developmental areas: vision; hearing; gross motor, fine
motor, and self-help skills; communication; and socialization. It is
explained that the test can be used to place children at one of the
following program levels: basic sensory stimulation for the
profoundly disabled (multiply handicapped nonambulatory children
confined to bed units); developmental task training for ambulatory
children who have secondary handicaps to their deaf-blindness; and
training in preacademic and daily living skills for visually and
auditorially handicapped children who have greater functional
ability. Included in the manual are instructions for test
administration and scoring, a list of needed equipment, and brief
discussions of special test factors to be considered (such as
behavioral characteristics and medication) and the need to obtain
further reliability/validity measures. (LH)

MANUAL

for the

DEAF-BLIND PROGRAM AND ABILITY SCREENING TEST

Developed Through:

Mississippi Deaf-Blind Evaluation Center

Ellisville State School

Ellisville, Mississippi 39437

By: J. Lyall, V. Henry, T. Graham, S. Lassiter, 1972

TABLE OF CONTENTS

I. PURPOSE

The Deaf-Blind Program and Ability Screening Test is a useful tool as an individual screening instrument for both children and adults with multiple handicaps of visual and auditory impairment. The test has been prepared for the use of teachers and professionals working with deaf-blind and multiple handicapped children. It is a screeening test for placement into program categories of training need for deaf-blind children. Typically, these are the children that are considered "not testable" due to their handicapping conditions. Persons working with programs for deaf-blind children are then left with one criteria for admittance into a program, that is whether the child is deaf and blind. It is apparent, however, that even deaf-blind children will function as individuals with a variety of levels of functioning. It is with this consideration, the levels of individual functioning of deaf-blind children and their program needs, that the following screening test was devised.

II. HISTORY

At Ellisville State School, Ellisville, Mississippi, a recent program for deaf-blind children was established through the Southeast Regional Deaf-Blind Program. This program was designed to serve deaf-blind children throughout the state and in residence at the institution. An initial glance at this population in the institution appeared to indicate that there were only three deaf-blind children within the population of the institution falling in the deaf-blind category. A closer look at the resident population, however, yielded twenty-four children falling into the broad classification of deaf-blind residents which was defined as "a child who has both auditory and visual impairments, the combination of which causes such severe communication and other developmental and education problems that he cannot properly be accommodated in special education programs either for the hearing handicapped child or for the visually handicapped child." This created an overwhelming need for finer guide lines of criteria with which the children could be placed in the available programs on an objective basis.

III. TEST CONSTRUCTION

The Deaf-Blind Program and Ability Screening Test is generally constructed on a developmental model to place children into three program functioning levels:

1. At the lower level are children who are deaf-blind, severely multi-handicapped, non ambulatory and confined to bed units. The basic need of these children is stimulation training.

2. The middle level of children are ambulatory or semi-ambulatory, and have secondary handicaps to their deaf-blindness. These children appear to have abilities to learn general developmental tasks.

3. The higher level of children have greater functioning ability and can be involved in other presently existing programs in the area of academics, socialization, or daily living skills for visually auditorially handicapped children.

The test consists of items in seven basic developmental areas that are appropriate for evaluating children with a multiple deaf-blind handicap.

The underlying rationale for this test is based on Gessell's Developmental Theory.

Gessell Developmental Fields	Includes	Tested by Following Developmental Area on Test
1. Motor Behavior	Posture, locomotion, prehension and postural sets	Gross Motor Skills Fine Motor Skills
2. Adaptive Behavior	Capacity to perceive significant elements in a situation and to use present and past experiences to adapt to new situations	Self-Help Skills
3. Language Behavior	All forms of communications and comprehensions by gestures, sounds, words	Vision, Hearing, Communication
4. Personal-Social	Personal reactions to other persons and to the social culture	Socialization

In addition to deaf-blindness the test also quantifies as major criteria for program placement: chronological age, intellectual functioning, multiple handicaps, behavior problems, and effects of medication.

Through content item analysis of the preliminary results those items yielding insignificant scoring patterns were deleted.

IV. SPECIAL TEST FACTORS

The problem of objectively evaluating deaf-blind children into final placement in the three program level needs is further complicated when factors such as age, general behavior characteristics, medication and secondary types of handicaps are considered. Because of these special factors it becomes imperative that these children be placed into the appropriate program level by considering as many factors as possible, so that the children with the greatest need and the most potential are served first.

For purposes of the Deaf-Blind Program and Ability Screening Test, the following factors are considered to be indicators of children with higher potential for program success: youth, higher intellectual abilities, minimal secondary handicaps, few behavior problems, and minimal medication so that it does not interfere with functioning. These special factors are quantified by scoring weights to obtain the priority scores.

V. GENERAL INSTRUCTIONS

This test is an individual screening test. Each child must be observed individually and data for the special factors must be obtained. The test is mostly scored by general observation of the child in the seven developmental areas: however, rattlers, blocks, and small items will be used in several test items. (See Section VII - Test Apparatus and Section VIII - Test Administration and Scoring.) Some of the items can be scored by responses from teachers, attendants or parents. The test can be given in any order as long as all items are given to any one child individually. The test is very short and should require only about ten minutes to complete.

VI. SCORING

The test results yield an ability score, a program priority score, extrapolated program levels and priority for service levels.

The child must be rated on each item on the test by checking either "yes" or "no". The "Yes" scores from each area are added to obtain a grand total ability score. The special factor items, one through six on the front of the test are scored according to the explanation given for each item. This special factor raw score is added to the ability score to obtain the priority score. (See Section IX - Program Level and Priority Level.)

The ability score is converted by the following table into program level scores.

Ability Points	Entitles Admission to:
1 - 14	Program Level 1 - Profoundly Disabled
15 - 24	Program Level 2 - Basic Developmental
25 - up	Program Level 3 - Daily Living

Priority level is obtained by rank order of the raw priority scores in any given level. Tables are not available for this because individual scores are ranked in comparison to other individual scores of the specific population being tested. (Table I illustrates conversion of scores with the sample population.)

In scoring the tests, any score of two or more points in the visual area or five or more points in the hearing area means that the children measured are not considered for this test purpose as deaf-blind children. These children should more appropriately be considered into visually or auditorially handicapped program instead of a deaf-blind category program.

VII. TEST APPARATUS

Following is a list of equipment needed to administer the test, along with the test item number.

    I. A. flashlight

        B. 12" diameter red ball

        C. 8 x 10 animal picture

   II. A. bell or drum

  III. A. rattle

        B. rattle

        C. (1) stuffed animal

             (2) 1" round ball

        D. four blocks

This kit is being developed. If interested, please contact the Mississippi Deaf-Blind Evaluation Center.

The child will receive a mark in the "yes" column for each task that he performs in the

in the scoring column.

1. Items marked with one asterisk (*) indicate that when an opportunity is not available to c

   directly, information may be obtained from parent or staff attendant.

2. Items marked with two asterisks (**) indicate that the child gets a mark in the yes colum

   accomplishing each part of task as indicated.

Item	Administration	Scoring
I. Vision		
A. Responds to light	A. Shine flashlight directly into child's eyes.	(1) The c or he his ey light
B. Responds to gross shapes of outlines	B. Place large object (12" diameter red ball) in front of child.	(2) The c large front
C. Responds to pictures	C. Show 8x10 animal picture to child. This task must be demonstrated so that the child understands that he is to trace over the picture with his hands.	(3) The c pictur
II. Hearing		
A. Loud sounds 1. Blinks eyes 2. Turns head or body 3. Vocalizes	A. Make noise with bell or drum	A. The c by ey movin Child colum

-10-

13

14

VIII. Test Administration and Scoring

ive a mark in the "yes" column for each task that he performs in the manner specified

one asterisk (*) indicate that when an opportunity is not available to observe the child

ion may be obtained from parent or staff attendant.

two asterisks (**) indicate that the child gets a mark in the yes column for successfully

part of task as indicated.

Administration	Scoring

ht

A. Shine flashlight directly into child's eyes.

(1) The child's eyes should contract or he should blink his eyes, or his eyes should water when a light shines directly in his eyes.

oss shapes

B. Place large object (12" diameter red ball) in front of child.

(2) The child should reach for a large object placed directly in front of him.

ctures

C. Show 8x10 animal picture to child. This task must be demonstrated so that the child understands that he is to trace over the picture with his hands.

(3) The child should trace over the picture with his hand.

A. Make noise with bell or drum

or body

A. The child should show response by eye blink, turning head or moving body or making sounds. Child gets a mark in the yes column for each type of response.

14

Item	Administration	Scoring
B. Normal voice 1. Blinks eyes 2. Turns head or body 3. Vocalizes	B. Speak to child in normal voice tones	B. The ch eye bl body o a mar type o
III. Gross Motor Skills		
A. Exhibits a startle response when touched	A. Touch child with hand	A. Child reacti
B. Turns from side to side	B. Observation *	B. The ch or sto to othe
C. Sits up unassisted	C. Place child in sitting position	C. Child his ow
D. Crawls	D. Observation *	D. Child
E. Stands unassisted	E. Place child in standing position.	E. Child alone.
F. Walks unassisted	F. Walk with child holding your hand and then release your hand.	F. Child himsel
IV. Fine Motor Skills		
A. Touches object presented	A. Hold rattle in front of child.	A. Child
B. Grasps object	B. Hand rattle to child	B. Child palm
C. Manipulates objects 1. Large objects 2. Small objects	C. 1. Hand large stuffed animal to child. 2. Hand 1" round ball to child.	C. 1. Ch wh 2. Ch ar

-11-

	Administration	Scoring

Left margin fragments:
- e
- ~~es~~
- ad or body
- s
- lls
- artle response
- side to side
- isted
- isted
- isted
- s
- ct presented
- t
- objects
- jects
- e⸱ts

Administration

B. Speak to child in normal voice tones

A. Touch child with hand

B. Observation *

C. Place child in sitting position

D. Observation *

E. Place child in standing position.

F. Walk with child holding your hand and then release your hand.

A. Hold rattle in front of child.

B. Hand rattle to child

C.
1. Hand large stuffed animal to child.
2. Hand 1" round ball to child.

Scoring

B. The child should show response by eye blink, turning head or moving body or making sounds. Child gets a mark in the yes column for each type of response.

A. Child should show a startle reaction

B. The child should turn from back or stomach to side, or from side to other side or back to stomach.

C. Child must continue to sit on his own.

D. Child must crawl around.

E. Child must continue to stand alone.

F. Child must be able to walk by himself.

A. Child must touch object.

B. Child must grasp object with palm of hand.

C.
1. Child must move object while holding it.
2. Child must move fingers around object.

Item	Administration	Scoring
D. Builds a tower of four cubes	D. Guide child's hand in building tower, one block at a time. Encourage child to build tower alone	D. Child n blocks
V. Self-Help Skills		
A. Feeds self 1. Finger feeds 2. Uses spoon 3. Uses fork 4. Drinks from a cup	A. Present food, utensils, and a cupful of water to child. Attempt to get child to do these things on his own or get data from parent or domitory attendant.	A. **
B. Toilet trained 1. Uses toilet when placed on it. 2. Expresses need to use toilet.	B. Observation *	B. **
C. Dresses self 1. Partially	1. Observation *	1. Child do one iten for part
2. Completely	2. Observation *	2. Child m clothing
VI. Communication		
A. Cries spontaneously	A. Observation *	A. **
B. Vocalizes (non-meaningful)	B. Touch or move child to see if you get a reaction.	B. Child n
C. Produces a single syllable by imitation	C. Make single syllable sounds to child, such as "i, e, u". Encourage him to imitate your sounds.	C. Child m appropr
D. Uses gestures appropriately to make basic needs known	D. Hand object to child to see if he reacts. If he does not take it away from him to see if you can get a reaction.	D. Child n pleasur crying.

-12-

	Administration	Scoring

of four

D. Guide child's hand in building tower, one block at a time. Encourage child to build tower alone

D. Child must build tower of four blocks on his own initiative.

A. Present food, utensils, and a cupful of water to child. Attempt to get child to do these things on his own or get data from parent or domitory attendant.

A. **

is

B. Observation *

B. **

n a cup

when placed

need to use

1. Observation *

1. Child does not have to put on but one item of clothing to get credit for partial dressing.

2. Observation *

2. Child must put on all items of clothing by himself.

ously

A. Observation *

A. **

meaningful)

B. Touch or move child to see if you get a reaction.

B. Child must make random noises.

gle syllable

C. Make single syllable sounds to child, such as "i, e, u". Encourage him to imitate your sounds.

C. Child must imitate sounds appropriately.

appropriately
eeds known

D. Hand object to child to see if he reacts. If he does not take it away from him to see if you can get a reaction.

D. Child must make action at any level—pleasure, resistance, pointing, crying.

Item	Administration	Scoring
E. Produces single words	E. Observation *	E. **
F. Produces simple sentences	F. Observation *	F. **
G. Carries on a conversation	G. Observation *	G. **

VII. Socialization

A. Responds to physical contact appropriately	A. Hug child	A. The chi or make respons another

B. Interacts with others
  1. Independent play
	B. (1-3) Put child in same room with other children.	B.
		  1. Child same who a

2. Parallel play		2. Child anoth him other
3. Cooperative play		3. Child childi

19

	Administration	Scoring

e words   E. Observation * .   E. **

le sentences   F. Observation *   F. **

onversation   G. Observation *   G. **

ysical contact   A. Hug child

A. The child should smile or laugh or make some other positive response when hugged or loved by another person.

others
play

B. (1-3) Put child in same room with other children.

B.

1. Child plays alone when in the same room with other children who are playing.
2. Child plays the same thing as another child who is next to him but he won't play with the other child.
3. Child plays with the other children around him.

ay

play

IX. PROGRAM LEVEL AND PRIORITY LEVEL

A.   Program Level

The program level obtained from the Deaf-Blind Program and Ability

Screening Test is a measure of the child's functioning ability and program

needs within the seven developmental areas.

The program levels used in this test are:

1.   Level one - Profoundly Disabled: These are multiple handicapped, non-ambulatory children in need of basic sensory stimulation, i. e., tactile, olfactory, gustotory, residual visual and residual auditory.

2.   Level two - Developmental Skills: These are children with secondary handicaps in need of training in basic developmental tasks, i. e., gross motor, fine motor, self-help, communication, social.

3.   Level three - Pre-Academic and Daily Living: These are higher functioning children whose basic program needs are academic, pre-vocational, arts and crafts, recreation, leisure time and independent activities.

In testing a given population of children they could distribute themselves

into any numerical combination of program levels.   The distributed scores

could then be used in two ways:

1.   To show the area of program need for a specific child.

2.   To show in a deaf-blind population the largest program area need.

B.   Priority Level

The priority level indicates which children should be included first

into a program.   (It is not a level of functioning indicator.) This score

is useful when program space is limited and several children are in need

of a particular program.

For example, assume there is program space for five children in a

level two program and there are 15 children in need of this type of program--

the priority level score would indicate which children should be included in

the program first.   The priority level score indicates the priority for the

child's placement within his program level, not across program levels.

For instance, when an opening occurs in program level two, the child with

the highest ranking priority score for that level would be admitted, even if

his priority ranking score is lower than children waiting to be admitted to

program levels one and three.

Table I illustrates ability scores converted to program levels, and

priority scores converted to priority levels.

DISTRIBUTION OF SCORES
OBTAINED ON
DEAF-BLIND PROGRAM AND ABILITY SCREENING TEST
WITH SAMPLE POPULATION

Subject	Raw Ability Score	Ability Score Converted to Program Level	Priority Score	Priority Scores Converted to Rank Order Priority Level
A	36	III	46	3
B	33	III	59	1
C	27	III	50	2
D	25	III	35	4
E	23	II	42	3
F	22	II	39	4
G	19	II	35	5
H	19	II	44	2
I	16	II	26	7
J	15	II	51	1
K	15	II	33	6
L	13	I	23	5
M	11		9	10
N	9	I	19	7
O	8	I	18	8
P	6	I	27	3
Q	5	I	29	2
R	5	I	11	9
S	5	I	25	4
T	4	I	36	1
U	4	I	20	6
V	3	I	5	11
W	2	I	4	12

X. VALIDITY AND RELIABILITY

Preliminary validity and reliability measures with independent examiners have yielded consistently non-significant differences in test results. However, sampling has been done on a small sample basis and the authors do not propose the working copy of the Deaf-Blind Program and Ability Screening Test to be a standardized valid and reliable instrument. Interpretations from utilization of this test should be made with this consideration until formal reliability and validity measures are obtained.

DEAF-BLIND PROGRAM AND ABILITY SCREENING TEST

```
┌─────────────────────────────────┐
│ PROGRAM LEVEL_____ │
│                                  │
│ PRIORITY LEVEL_____  │
└─────────────────────────────────┘
```

NAME_____

DATE OF BIRTH_____

CHRONOLOGICAL AGE_____ MENTAL AGE_____

1. _____ Add 10 points if difference in mental age and chronological age is less than 5 years.

2. _____ If chronological age is 21 or less add 1 point for each year under 21. (See chart on back page.)

3. _____ Add 10 points if not mentally retarded. Add 5 points if mild or borderline. If retarded add no points, but indicate degree of retardation: _____ borderline, _____ mild, _____ moderate, _____ severe, _____ profound.

4. _____ Add 10 points if not multiply handicapped. If handicapped add no points, but indicate nature of handicap: _____ cerebral palsy, _____ brain damage, _____ epileptic, _____ physically handicapped, _____ hydro- cephalic, _____ seizures, _____.

5. _____ Add 10 points if no behavior problem. If behavior problem exists add no points but indicate type: _____ temper tantrums; _____ bites self; _____ screams; bites others _____; _____ undresses self; _____ hostile; _____ bangs head; _____ hyperactive; _____ withdrawn; _____ not rational.

6. _____ If heavily medicated so that it interferes with functioning SUBTRACT 10 points.

TOTAL SPECIAL FACTORS _____ (Items 1-6 above)

_____ ABILITY SCORE (Total Points Earned on Screening Test; get from last page)

_____ PROGRAM PRIORITY SCORE (Total Points Earned on items 1-6 above plus Ability Score)

- -

BY: J. Lyall, V. Henry, T. Graham, S. Lassiter, 1972.

25

OBSERVATION

YES/NO		
	E.	Produces simple words
	F.	Produces simple sentences
	G.	Carries on a conversation

VII. SOCIALIZATION [TOTAL SCORE]

A. Responds to physical contact (appropriately)

B. Interacts with others
   1) Independent play
   2) Parallel play
   3) Cooperative play

VIII. GRAND TOTAL ABILITY SCORES (TOTAL PARTS I-VIII) [____]

DATE _____   EXAMINER _____

CHRONOLOGICAL AGE	ADD THIS MANY POINTS	CHRONOLOGICAL AGE	ADD THIS MANY POINTS
21	1	11	10
19	2	10	11
18	3	9	12
17	4	8	13
16	5	7	14
15	6	6	15
14	7	5	16
13	8	4	17
12	9	3	18
		2	19
		1	20

Written by: Jerry Lyall, Virginia Henry, Terry Graham, Suzie Lassiter

Available from: Ellisville State School
                   Deaf-Blind Center
                   Ellisville, Mississippi 39437

YES	NO		OBSERVATION
		I. VISION TOTAL SCORE	
		Responds to visual stimuli	
		A. Responds to light	
		B. Responds to gross shapes of outlines	
		C. Responds to pictures	
		II. HEARING TOTAL SCORE	
		Responds to auditory stimuli	
		A. Loud sounds	
		1) Blinds eyes	
		2) Turns head or body	
		3) Vocalizes	
		B. Normal voice	
		1) Blinks eyes	
		2) Turns head or body	
		3) Vocalizes	
		III. GROSS MOTOR SKILLS TOTAL SCORE	
		A. Exhibits a startle response when touched	
		B. Turns from side to side	
		C. Sits up unassisted	
		D. Crawls	
		E. Stands unassisted	
		F. Walks unassisted	

27

YES	NO	
		IV. FINE MOTOR SKILLS $\boxed{\text{TOTAL SCORE}}$
		A. Touches object presented
		B. Grasps object
		C. Manipulates objects
		1) Large objects
		2) Small objects
		V. SELF HELP SKILLS $\boxed{\text{TOTAL SCORE}}$
		A. Feeds self
		1) Finger feeds
		2) Uses spoon
		3) Uses fork
		4) Drinks from cup
		B. Toilet trained
		1) Uses toilet when placed on it
		2) Expresses need to use toilet
		C. Dresses self
		1) Partially
		2) Completely
		VI. COMMUNICATION $\boxed{\text{TOTAL SCORE}}$
		A. Cries spontaneously
		B. Vocalizes (non-meaningful)
		C. Produces single syllables by imitation
		D. Uses gestures appropriately to make basic needs known